

CLAIMS

What is claimed is:

1. A chimeric antibody, comprising at least part of a human immunoglobulin constant region and at least part of a non-human immunoglobulin variable region, said antibody capable of binding an epitope specific for human tumor necrosis factor TNF α .
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2. A chimeric antibody according to claim 1, wherein said binding of said antibody to TNF α inhibits a pathologic activity of TNF α .
3. A chimeric antibody according to claim 1, wherein said chimeric antibody comprises two light chains and two heavy chains, each of said chains comprising at least part of a constant region and at least part of a variable region, said variable region capable of binding an epitope of human TNF α .
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4. A chimeric antibody according to claim 1, wherein said antibody neutralizes human TNF α under physiological conditions.
- 15 5. A chimeric antibody according to claim 1, wherein said variable region is of murine origin.
6. A chimeric antibody according to claim 1, wherein said variable region is derived from a high affinity murine monoclonal antibody which binds to a neutralizing epitope of human TNF α .

7. A chimeric antibody according to claim 6, wherein said murine monoclonal antibody competitively inhibits the binding of monoclonal antibody cA2 to TNF α .
8. A chimeric antibody according to claim 1, characterized by an affinity, measured as an association constant (Ka), of at least 1×10^8 liter/mole.
9. A chimeric antibody according to claim 8, wherein said affinity, measured as an association constant (Ka), is at least 1×10^9 liter/mole.
10. A chimeric antibody according to claim 1, wherein said antibody neutralizes human TNF α with an ID50 of at least 1 μ g/ml.
- 10 11. A chimeric antibody according to claim 10, wherein said antibody neutralizes human TNF α with an ID50 of at least 15 ng/ml.
12. A chimeric antibody according to claim 11, wherein said antibody neutralizes human TNF α with an ID50 of at least about 100 ng/ml.
13. A chimeric antibody according to claim 1, wherein said antibody is in detectably labeled form.
14. A chimeric antibody according to claim 1, wherein said antibody is produced recombinantly.
15. A chimeric antibody, comprising at least part of a human IgG1 constant region and at least part of a non-human immunoglobulin variable region, said antibody capable of binding an epitope specific for human TNF α .

16. A chimeric antibody according to claim 15, wherein said binding of said antibody to TNF α inhibits a pathologic activity of TNF α .
17. A chimeric antibody according to claim 15, wherein said chimeric antibody comprises two light chains and two heavy chains, each of said chains comprising at least part of a constant region and at least part of a variable region, said variable region capable of binding an epitope of human TNF α .
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18. A chimeric antibody according to claim 15, wherein said antibody neutralizes human TNF α under physiological conditions.
19. A chimeric antibody according to claim 15, wherein said variable region is of murine origin.
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20. A chimeric antibody according to claim 15, wherein said variable region is derived from a high affinity murine monoclonal antibody which binds to a neutralizing epitope of human TNF α .
21. A chimeric antibody according to claim 20, wherein said murine monoclonal antibody competitively inhibits the binding of monoclonal antibody cA2 to TNF α .
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22. A chimeric antibody according to claim 15, characterized by an affinity, measured as an association constant (Ka), of at least 1×10^8 liter/mole.
23. A chimeric antibody according to claim 22, wherein said affinity, measured as
20 an association constant (Ka), is at least 1×10^9 liter/mole.

24. A chimeric antibody according to claim 15, wherein said antibody neutralizes human TNF α with an ID50 of at least 1 μ g/ml.
 25. A chimeric antibody according to claim 24, wherein said antibody neutralizes human TNF α with an ID50 of at least 15 ng/ml.
- 5 26. A chimeric antibody according to claim 24, wherein said antibody neutralizes human TNF α with an ID50 of at least about 100 ng/ml.
27. A chimeric antibody according to claim 15, wherein said antibody is in detectably labeled form.
 28. A chimeric antibody according to claim 15, wherein said antibody is produced recombinantly.
- 10 29. A chimeric antibody, comprising at least part of a human immunoglobulin constant region and at least part of a non-human immunoglobulin variable region, wherein said antibody competitively inhibits the binding of monoclonal antibody cA2 to TNF α .